



STATUS REPORT

Progress and Improvements

DPW BUREAU/OFFICE Back River Wastewater Treatment Plant (Back River)

Date 11/25/2022

Parameters	Week ending 11/14/22	Week ending 11/21/22	Permit limit	Meeting Requirement
Total Suspended Solids (TSS)	1 mg/l	1 mg/l	15 mg/l	Yes
Biochemical oxygen demand (BOD)	<2.0 mg/l	<2.0 mg/l	15 mg/l	Yes
Total phosphorus (TP)	<0.10 mg/l	<.10 mg/l	0.30 mg/l	Yes
Ammonia (NH3)	0.2 mg/l	0.3 mg/l	N/A mg/l	N/A
Total nitrogen (TN)	1.5 mg/l	1.9 mg/l	4.0 mg/l	Yes
E-coli	1 MPN/100 ml	5 MPN/100 ml	126 MPN/100 ml	Yes

MPN = Most Probable Number

NOTE: AMMONIA PERMIT IS SEASONAL FROM 5/1-10/31. THERE IS NO PERMIT LEVEL OTHERWISE

Personnel Updates

On December 8, 2022, Mayor Brandon M. Scott and Director Jason W. Mitchell, Ed.D. will be hosting a signing day for the participants in our inaugural class of the B'More WISE Program. The B'More WISE Program will provide training to 10-20 individuals interested in a career in the Water and Wastewater Industry. This apprenticeship will help mitigate staffing concerns at in DPW operations while also providing participants with job readiness and training in a specialized skill set.

Training Updates

Maintenance staff have been focusing on the preventive maintenance (PM) of the process areas. Maintenance staff trained on the Rapid Ready Cityworks software deployment on 11/16/22. The existing maintenance management software, ELKE, will be used concurrently with the Cityworks software in order to continue to capture all necessary information until such time plant staff is comfortable that all pertinent information has been transferred to the new software and the ELKE system will be phased out.

The City is moving toward a Reliability Centered Maintenance culture. Therefore, DPW is prioritizing major equipment in each process area of the plant. Preventative maintenance and continual lubrication will extend the performance and life of equipment. In support of this effort, the

maintenance teams are taking a lubrication course on December 6 and 7. This is being taught by Des-Case, an industry leader in lubrication support of equipment life.

Maintenance Updates

In-Ground Digester cleaning and repairs for #1 and #4 are ongoing. Timeline for completion is on schedule for early 2023. The contract for rehabilitation of all remaining digesters, in ground and egg shaped, is being processed for award. Notice to proceed on that contract will be near the end of the year. The digestion process reduces the amount of biosolids requiring treatment prior to removal while improving methane production for the plant co-generation efforts which supply power to the plant facilities.

Primary Settling Tank (PST) #7 is nearing restart with a tentative in-service date of 12/5, possibly before. The focus will then shift to repairs of PST #2 and #9, which will tentatively return to service by February 2023.

Summary

DPW has made substantial progress toward full compliance at Back River. More specifically, suspended solids, biochemical oxygen demand, total phosphorus, ammonia, and total nitrogen have decreased significantly since March 2022. **All monthly parameters are currently under permit limits and Back River has maintained compliance since June.**

DPW recognizes that Back River is a valuable asset to the Baltimore region and the path forward to sustained compliance is on-track.